

Activity:	Construction Planning
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Activity Summary

Program Components	2004 Enacted	2005 Estimate	2006			Change From 2005 (+/-)
			Uncontr/ Related Changes	Program Changes (+/-)	Budget Request	
Construction Planning	24,179	20,925	0	-1,000	19,925	-1,000
Total Requirements	24,179	20,925	0	-1,000	19,925	-1,000

Authorization

16 U.S.C. 1 The National Park Service Organic Act

Mission Overview

Construction Planning contributes to the National Park Service's mission, and the Department of the Interior's mission in two primary mission goal areas: 1) Natural and cultural resources and associated values are protected, restored, and maintained in good condition and managed within their broader ecosystem and cultural context, and 2) Visitors safely enjoy and are satisfied with the availability, accessibility, diversity, and quality of park facilities, services, and appropriation recreational opportunities. The Construction Planning program also supports Department of the Interior goals PEO 1 (Resource Protection) Improve Health of Watersheds, Landscapes and Marine Resource; PEO 3 (Resource Protection) Protect Cultural and Natural Resources; and REO 1 (Recreation) Provide for quality recreation experience.

Activity Overview

This activity accomplishes special technical investigations, surveys, and comprehensive design necessary for preliminary planning, and to ensure that initial phases of the development planning process allows for the proper scheduling, and information gathering, to successfully complete construction projects. Funds are used to acquire archeological, historical, environmental, and engineering information and prepare comprehensive designs, working drawings, and specification documents needed to construct or rehabilitate facilities in areas throughout the National Park System.

FY 2006 Base Program Overview

As one of the key activities of major construction projects for the National Park Service, construction planning serves to lay the groundwork for actual construction with design, budgeting, condition surveys, and other services. This allows for more efficient and effective execution of the construction phase of work. Planning further serves to provide for the best possible visitor experience by adequately providing for sound, safe, and appropriate infrastructure.

This activity consists of the resources needed for a two-step planning process to assure the satisfactory completion of large construction projects. The first step consists of pre-design and supplementary services that need to be completed before final design starts and construction documents are completed. These typically include project programming and budgeting, resources analysis, existing condition surveys, site analysis, geotechnical engineering, utilities studies, and surveys. Supplementary services and environmental reporting are tasks that are usually completed concurrently with pre-design activities. These typically include natural, cultural and archeological investigations, special consultations, fire security, safety, ergonomics, rendering, modeling, special graphic services, life-cycle cost analysis, value analysis studies, energy studies, resources compliance studies, hazardous materials surveys, detailed cost estimating, monitoring, and testing and mitigation. Compliance documents underway concurrently with pre-design documents are funded separately. Pre-design includes presentation of a recommended design concept to the Servicewide Development Advisory Board.

The second process is project design. Project design includes the preparation of preliminary and final architectural, landscape and engineering drawings and specifications necessary for the construction of utilities, roads and structures. Under this activity final construction drawings and specifications are prepared and final cost estimates and contract-bidding documents are developed. Without completion of these tasks, actual construction awards could never be made. Architectural/engineering contractors will accomplish almost all of the project design activity. The funding level requested will enable the Service to keep pace with the large line item construction program backlog of non-road reconstruction and replacement projects on the recently revised Servicewide Five-Year Deferred Maintenance and Capital Improvement Plan.

Construction planning criteria can change from year to year, but generally, priority consideration is normally given in the following order based on:

1. Planning and design for previously appropriated line item construction projects.
2. Planning and design for line item construction projects appropriated in the current fiscal year.
3. Planning and design for Congressionally added and funded projects in the current fiscal year.
4. Projects or phased components of projects of the National Park Service's 5-year Construction Program scheduled and approved for funding by the Service's Development Advisory Board (DAB) within the next two fiscal years.

Construction planning is included in the construction line item estimates for the following projects: Everglades NP, Florida-Modified Water Delivery; Olympic NP, Washington-Restore Elwha River Ecosystems; and the White House, Washington, D.C.-Rehabilitate and Restore the Executive Residence and President's Park. Of the other Line Item Construction projects listed on the Comprehensive Table in the Line Item Construction Activity, several do not require additional funding above amounts currently available to complete all required planning, resulting in a decreased need for this program in FY 2005.

The NPS has increased its efforts to prepare capital asset plans for major construction projects, consistent with OMB Circular A-11 and the Federal Acquisition Streamlining Act. These plans identify the cost, schedule, and performance goals of proposed projects and then track the project's progress in meeting those goals.

In conformance with Congressional language contained in the reports accompanying the FY 2004 appropriation, included below is a list of projects estimated at over \$5.0 million contained in the approved 5-Year Deferred Maintenance and Capital Improvement Plan that represent new planning starts for FY 2004.

<u>PARK</u>	<u>PROJECT DESCRIPTION</u>	<u>RGN</u>	<u>STATE</u>	<u>FY</u>	<u>\$000¹</u>
Dinosaur NP	Construct and Supply Curatorial Facility	IM	CO	2007	7,445
Mesa Verde NP	Replace Waterline Chapin Mesa to North Park Boundary	IM	CO	2007	6,093
Yellowstone NP	Rehabilitate Historic Gardiner Transportation Complex	IM	MT	2007	11,413
Chesapeake & Ohio Canal NHP	Reconstruct and Stabilize Big Slackwater Stone Wall and Towpath	NC	MD	2008	12,504
Harpers Ferry NHP	Restoration and Rehab of Building 56, Lochwood House and Camp Hill	NC	WV	2007	5,188
Kalaupapa NHS	Replace non-compliant Cesspools per State and EPA Mandates	PW	HI	2007	5,392
San Francisco Maritime NHP	Rehab Failing Amphitheatre Structure in Aquatic Park	PW	CA	2007	8,439
Golden Gate NRA	Replace Obsolete Radio System for Safe Emergency Communication	PW	CA	2007	7,696
Mount Rainier NP	Replace Sunrise Lodge and Related Site Improvements	PW	WA	2008	10,489
Lassen Volcanic NP	Correct Deficiencies with Hazardous Utility System at Lassen Headquarters	PW	CA	2008	5,173
Fort Raleigh NHP	Rehabilitate Visitor Center Complex	SE	NC	2007	6,184

¹ Amounts shown are for estimated costs of the construction projects, not the planning costs.

FY 2004 Program Performance Accomplishments

Performance on NPS strategic goal: In previous years this goal has recorded accomplishments as a measurement in the number of projects that were completed on time, within schedule and within scope. The performance accomplishments for Construction Planning were changed in 2004, accomplishments are now included within the reporting of other NPS mission goals primarily under goal RIM.1.04.001 which measures facility conditions. In 2004, Construction Planning was complete on 46 projects. The value of deferred maintenance to be included in future construction contracts for these projects totaled approximately \$78.3 million. The 46 completed Construction Planning projects included 16 cultural heritage projects and 2 natural resource projects which will contribute to meeting Resource Protection goals when construction activities are completed.

Effective use of Construction Planning Funds: Construction Planning funds have individual spending caps for each phase of design development. These caps are based on a predetermined percentage of net construction cost as follows: supplemental services - 2%, pre-design - 5% and final design - 7%. In FY 2004 the design development caps were not exceeded for the program, and design development was completed within available funding.

Value Analysis/Engineering: Value analysis occurs during the pre-design phase of each project and is a highly effective method for exploring alternatives, identifying functional activities, and seeking creative ways of accomplishing the functions at best value costs. Approximately 90 value analysis studies were completed in FY 2004 creating a total cost avoidance of approximately \$21.0 - \$24.0 million.

FY 2005 Program Performance Accomplishments

Performance on NPS strategic goals: Beginning in FY 2005 project descriptions will contain Facility Condition Index Information, where this information is available. Construction Planning funds will be used to complete design development that meets the stated NPS goals identified in the original Project Information Management System entry as follows:

- Goal PEO 1 - Resource protection, when the original scope of work includes reference to Resource Protection goals such as goals 1a1C, 1a1D, 1a1E, 1a1F, 1a4A, Construction Planning funds will be used to produce preliminary design and construction documents to meet the goals stated in the project description. Accomplishment of resource goals will be measured at the completion of construction and reported at the park level.
- Goal PEO 3 – Resource protection, when the original scope of work includes reference to Resource Protection goals such as goals 1a5A, 1a5 and 1a7, Construction Planning funds will be used to produce preliminary design and construction documents to meet the goals stated in the project description. Accomplishment of these resource goals will be measured at the completion of construction and reported at the park level.
- Goal REO 1 – Recreation, when to original scope of work includes references to improving Recreation and Visitor Services goals such as goals 1la8, Accessibility, and RIM.1.04.001 Facility Condition, preliminary design and construction documents will meet the 100% of the accessibility requirements and Facility Condition Index improvements stated in the original scope of work. Accomplishment of these Recreation goals will be measured at the completion of construction and reported at the park level.

Effective completion of design development:

The FY 2005 goal for expending Construction Planning funding for each phase of design development is:

- Pre-design development is complete for each project prior to the project being submitted as part of the NPS Line-Item Construction and Maintenance Program budget submission.
- Design development is complete for 70% projects no later than the 1st quarter of the year of construction, and 100% of projects have completed design development by 3rd quarter of the year of construction.

Value Analysis:

100% of all major construction projects in pre-design development and having a net construction value of \$1.0 million or greater will have completed a value analysis evaluation prior to review by the NPS Development Advisory Board.